

# 1. For your safety

The luminaire has been designed in accordance with state-of-the-art standards, manufactured with utmost care using high-quality materials, and tested.

Nevertheless, its use may constitute a risk to persons or cause material damage.



- Read all enclosed instructions and information.
- ▶ Please observe the warnings included in the documentation and attached to the unit.
- ► The device must only be used in technically perfect condition, and only by persons being aware of the risks and dangers involved in operating the device.
- Keep this document available near the device.

# 1.1 Designated use

This luminaire is a system luminaire and used for lighting modular system workstations. The luminaire is used in addition to general lighting.

The luminaire model SAH... **A** has been especially designed for use in electrostatically protected areas (EPA).

## 1.2 Safety instructions

## **Explosion hazard**

Operating the luminaire in rooms subject to explosion hazards can trigger an explosion and result in serious injuries or death.

▶ **Do not** operate the luminaire in rooms subject to explosion hazards.

#### Danger due to electric current

Improper use and faulty work on the luminaire may result in injuries and material damage.

- ► Compare the mains voltage with the nominal voltage and the frequency specified on the rating plate and make sure that they are identical.
- ▶ Disconnect a damaged connecting cable immediately from the power supply and have it replaced by the manufacturer or by a skilled electrician.
- ► Have maintenance and repair work carried out by a skilled electrician only.
- ▶ Before performing work on the luminaire, disconnect the luminaire from the power supply.

#### Safe mounting

A luminaire falling down can result in personal injuries and material damage.

- ▶ Use only the delivered fastening elements or other suitable fastening elements available from the manufacturer.
- Mount the fastening elements correctly.

#### Hazard caused by unsuitable spare parts

Unsuitable spare parts can result in injuries and material damage.

Only spare parts released by the manufacturer may be used as spare parts.

#### Risk of corrosion

Operating the luminaire in moist rooms can result in material damage.

Operate in dry rooms only.



## 1.3 Warning levels

## **DANGER**

Warnings against hazards that result directly in serious injuries or death in case of non-observance.

# **MARNING**

Warnings against hazards that may result in **serious injuries or death** in case of non-observance.

# **CAUTION**

Warning against hazards that may result in **injuries** in case of non-observance.

## NOTICE

Warning against hazards that may result in **material damage** in case of non-observance.



### 2. Model overview

For optimum installation and use of the luminaire, you have to identify the luminaire model unambiguously. To do so, you will require the model number of the luminaire.

**NOTE:** The model number can be found on the rating plate of the luminaire.

- ► Check which model number the luminaire has.
- ▶ Determine the luminaire model by referring to the following table, see Tab. 1. For an explanation of the functions, see chapter 5 "Functions of the luminaire", page 32.

<b>Example</b> : The model number <b>SAHZQ 88 R</b> stands for the following luminaire model:				
SAH	Z	Q	88	R
TAMETO System luminaire	Mounting type: Top, suspended	Lamps: LED	Key: 88	Version R Functions: Switchable Dimmable

Type	Mounting type	Lamps	Key	Version	Functions
SAH	-	-	124	-	Switchable
TAMETO System	Top, fixed	Fluorescent lamp	139 154		
luminaire				R	Switchable
	Z				Dimmable
	Top, suspended			D	Switchable
	suspended	Q	44	_	Through-wiring
	K	LED	60	RD	Switchable
	Lateral		66		Dimmable
			88		Through-wiring
				Α	Switchable
					Suitable for EPA

Tab. 1: Model overview.

# 3. Mounting

# **CAUTION**

# Risk of injury caused by a falling luminaire.

Personal injury and material damage.

- Use only the delivered fastening elements or other suitable fastening elements available from the manufacturer.
- ► Mount the fastening elements correctly.

#### **NOTICE**

# Material damage caused by missing ESD protection.

Electrostatic discharge and damage to electronic components.

- ► In electrostatically protected areas (EPA), only luminaires suitable for EPA must be used.
- Use only fastening elements suitable for EPA.

## 3.1 Mounting types

Depending on the luminaire model, the luminaire is mounted in different ways.

The following mounting types are possible:

- Mounting type "Top, fixed"
- Mounting type "Top, suspended"
- Mounting type "Lateral"

If you want to determine the luminaire model, see chapter 2 "Model overview", page 25.

#### 3.2 Mounting the side parts

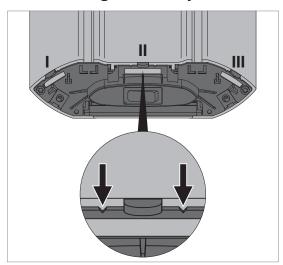


Fig. 1: Preparing the cable bushing.

▶ Remove the cable bushing at the notches in positions I, II or III, where the connecting cable is to emerge from the luminaire, using a pair of pliers, see Fig. 1

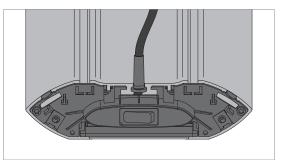


Fig. 2: Positioning the grommet.

► Guide the connecting cable through the cable bushing and slide the grommet into the cable bushing, see Fig. 2.



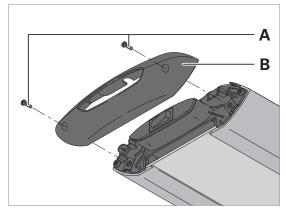


Fig. 3: Mounting the side part.

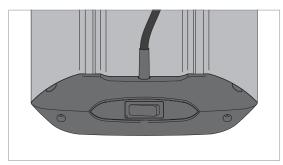


Fig. 4: Side part and grommet mounted.

- ► Mount the side part **B** using the enclosed screws **A**, see Fig. 3 and see Fig. 4.
- ► Mount the second side part on the other side of the luminaire.

# 3.3 Mounting the luminaire of mounting type "Top, fixed"

▶ Mount one side part on each side of the luminaire, see chapter 3.2 "Mounting the side parts", page 26.

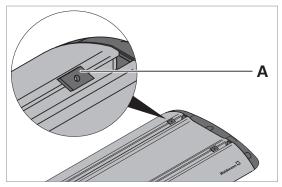


Fig. 5: Inserting the slide nuts.

► Insert the four enclosed slide nuts A into the T-slots of the luminaire, see Fig. 5.

**NOTE:** The brackets for the mounting type "Top, fixed" can be mounted in different ways. To adjust the vertical alignment, the brackets can be mounted turned upwards or downwards as desired.

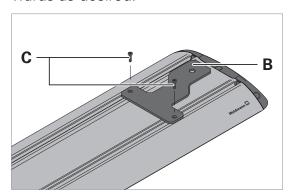


Fig. 6: Mounting the bracket for mounting type "Top, fixed", 1st option.

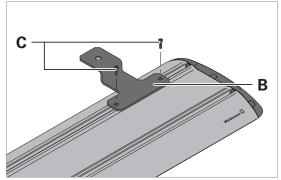


Fig. 7: Mounting the bracket for mounting type "Top, fixed", 2nd option.

Mount the two enclosed brackets B on the luminaire using the enclosed screws C and the slide nuts and tighten the screws, see Fig. 6 or see Fig. 7.

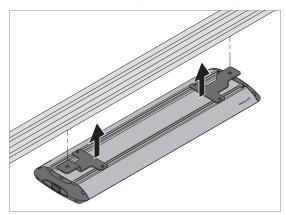


Fig. 8: Mounting the luminaire of mounting type "Top, fixed", 1st option.

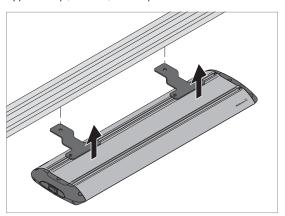
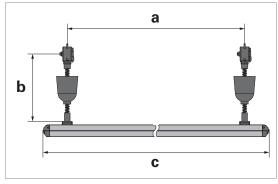


Fig. 9: Mounting the luminaire of mounting type "Top, fixed", 2nd option.

Mount the luminaire on the mounting surface using suitable screws and tighten the screws, see Fig. 8 or see Fig. 9.

# 3.4 Mounting the luminaire of mounting type "Top, suspended"



No.	Dimension	
	SAHZ 139	750 mm
•	SAHZQ 66	
а	SAHZ 154	1050 mm
	SAHZQ 88	
b	approx. 300 – a	oprox. 1360 mm
	SAHZ 139	956 mm
	SAHZQ 66	
С	SAHZ 154	1256 mm
	SAHZQ 88	

Tab. 2: Dimensions.

- Mount two suitable fastening hooks on the system workstation. To do so, use the dimensions of the luminaire, see Tab. 2.
- ► Hold the cable reel of the rise-and-fall pendant and unscrew the ceiling rose from each cable reel.
- Suspend the luminaire by hanging the two cable reels with the eyelets into the hooks.



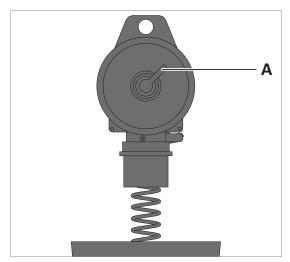


Fig. 10: Setting the spring force of the riseand-fall pendants.

- ➤ Set the spring force of the rise-and-fall pendants at the rotary handle **A** of the cable reel to such a value that the luminaire can be easily height-adjusted, see Fig. 10.
- ► Connect the luminaire, see chapter 4 "Connection", page 30.
- ► Slide the ceiling rose upwards and screw it down on the thread of the cable reel.
- ▶ Position the luminaire at the desired height.

# 3.5 Mounting the luminaire of mounting type "Lateral"

▶ Mount one side part on each side of the luminaire, see chapter 3.2 "Mounting the side parts", page 26.

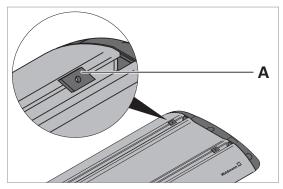


Fig. 11: Inserting the slide nuts.

► Insert the two enclosed slide nuts A into the T-slots of the luminaire, see Fig. 11.

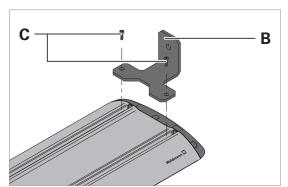


Fig. 12: Mounting the brackets for mounting type "Lateral".

► Mount the enclosed brackets **B** on the luminaire using the enclosed screws **C** and the slide nuts and tighten the screws, see Fig. 12.

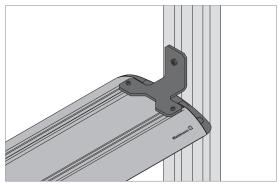


Fig. 13: Mounting the luminaire of mounting type "Lateral".

- ▶ Mount the luminaire on the mounting surface using a suitable screw, see Fig. 13.
- ► Align the luminaire such that the work area is optimally lighted.
- ▶ Tighten the screw on the mounting surface.

#### 4. Connection

#### NOTICE

# Material damage caused by wrong mains voltage.

Damage or destruction of the luminaire.

Compare the mains voltage with the nominal voltage and the frequency specified on the rating plate and make sure that they are identical.

#### **ACHTUNG**

# Material damage caused by wrong handling.

Omission of the ESD protection and damage to electronic components.

- ▶ **Do not** connect the protective earth conductor of the luminaire to a grounding contact point.
- ► Luminaires suitable for EPA must remain plugged in in electrostatically protected areas (EPA).

# 4.1 Connecting the luminaire of mounting type "Top, fixed" or "Lateral"

▶ Plug the mains plug into a socket.



# 4.2 Connecting the luminaire of mounting type "Top, suspended"

## **MARNING**

#### Danger of death due to electric shock.

► The connection must be made by a trained skilled electrician only.

## NOTICE

# Material damage caused by wrong connection.

Damage or destruction of the luminaire.

Observe the wire assignment.

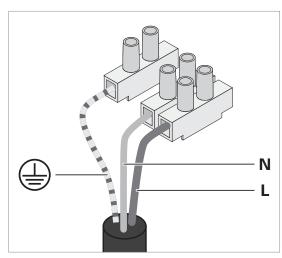


Fig. 14: Connecting the suspended luminaire.

Connect the luminaire to the terminal, see Fig. 14.

#### 4.3 Through-wiring

Luminaires with through-wiring can be linked to one another via the pre-mounted plug-in connection "GST 18i3S". These luminaires are identified by the letter **D** in the model number, for example SAHQ 88 D.

To connect the first luminaire, a connecting cable is recommended, which can be found in the Waldmann range of accessories.

For more information on the accessories of this luminaire, please visit the Waldmann home page

## **MARNING**

#### Danger of death due to electric shock.

Before establishing or disconnecting the plug-in connection, disconnect the luminaire from the power supply.

**NOTE:** In luminaires with through-wiring connected in series, the total current consumption must not exceed **2 A**. The current consumption of the different luminaire models can be found in the following table:

Luminaire model	Current consumption
SAHQ 44 xD	0.10 A
SAHQ 66 xD	0.15 A
SAHQ 88 xD	0.20 A
SAH124 xD	0.13 A
SAH139 xD	0.21 A
SAH154 xD	0.28 A

Tab. 3: Current consumption per luminaire.

Connect the luminaires to one another using the device plug-in connection "GST 18i3S".

# 5. Functions of the luminaire

Depending on the luminaire model, the luminaire has different functions. If you want to find out which functions the luminaire has, see chapter 2 "Model overview", page 25.

#### 5.1 Switchable

This function can be used to switch the luminaire on and off.

#### 5.2 Dimmable

This function is used to change the brightness of the luminaire.

### 5.3 Through-wiring

This function can be used to link several luminaires electrically to one another.

#### 5.4 Suitable for EPA

Luminaires with this function can be grounded and are suitable for use in electrostatically protected areas (EPA).

## 6. Operation

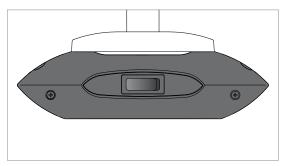


Fig. 15: Button.

#### 6.1 Switch-on and switch-off

▶ Press the button, see Fig. 15.

#### 6.2 Dimming

Press the button and keep it depressed, see Fig. 15.

After about one second, the luminaire will change its brightness.

This will save the set brightness. The next time the luminaire is switched on, the brightness saved last will be set.



# 7. What to do if?

Problem	Possible causes	Corrective action
Luminaire is not lit.	Plug not plugged in.	▶ Plug the plug into a socket or into the socket provided for this purpose, see chapter 4 "Connection", page 30.
	Luminaire is defective.	► Contact our service team.
Luminaire does not	Software function is defective.	Unplug the plug for a few seconds.
respond to inputs.		If the luminaire still doesn't respond, contact our service team.
The connecting cable is damaged.	Mechanical impact on the connecting cable.	▶ Disconnect a damaged connecting cable immediately from the power supply and have it replaced by the manufacturer or by a skilled elec- trician.

Tab. 4: What to do if?

# 8. Replacing the lamp

# 8.1 Replacing the lamp of a LED luminaire

#### **NOTES:**

- Luminaires with LED lamps are identified by the letter Q in the model number, for example SAHZQ 88 R.
- The luminaire is maintenance-free. A lamp replacement is not required. If nevertheless a lamp should break down, our service team can be reached at:

# 8.2 Replacing the lamp of a luminaire equipped with a fluorescent lamp

**NOTE:** Luminaires with fluorescent lamps do not have the letter  $\mathbf{Q}$  in the model number, for example SAH 154 D.

# **MARNING**

#### Danger of death due to electric shock.

- ▶ Disconnect the luminaire from the power supply.
- ► Allow the lamp to cool down.

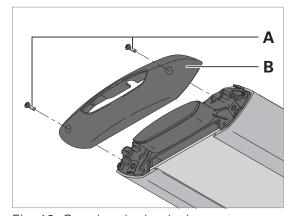


Fig. 16: Opening the luminaire.

- ► Unscrew the screws A from one side part of the luminaire, see Fig. 16.
- ► Remove the side part **B**.

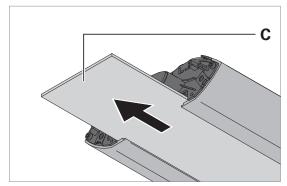


Fig. 17: Pulling out the cover.

▶ Pull the prism cover **C** or the parabolic grid out of the luminaire, see Fig. 17.



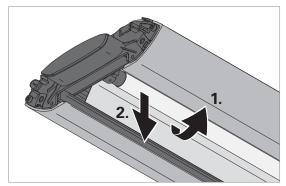


Fig. 18: Replacing the lamp.

- ► Rotate the lamp by 90° and take out the lamp toward the bottom, see Fig. 18.
- ► Insert the new lamp horizontally from below into the sockets.
- Rotate the lamp by 90°.
- ▶ If the luminaire is equipped with a prism cover: Slide the cover again into the luminaire such that the structure of the cover points into the direction of the light exit.

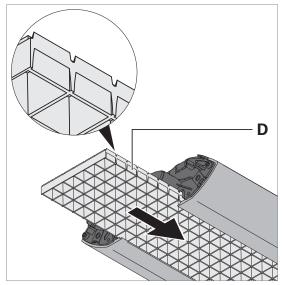


Fig. 19: Sliding in the parabolic grid.

- ▶ If the luminaire is equipped with a parabolic grid **D**: Slide the parabolic grid again into the luminaire such that the thin ligaments of the grid point into the direction of the light exit, see Fig. 19.
- ► Mount the side part again on the luminaire.

# 9. Retrofitting a protective cover

In addition to the parabolic grid, you can also mount a protective cover, to keep the inside protected from dust.

**NOTE:** Suitable protective covers can be found in the Waldmann range of accessories. For more information on the accessories of this luminaire, please visit the Waldmann home page at:

www.waldmann.com

# **MARNING**

#### Danger of death due to electric shock.

▶ Disconnect the luminaire from the power supply.

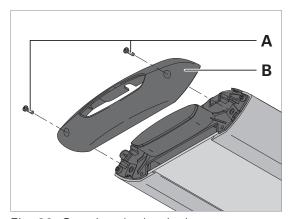


Fig. 20: Opening the luminaire.

- ► Unscrew the screws A from one side part of the luminaire, see Fig. 20.
- ► Remove the side part **B**.

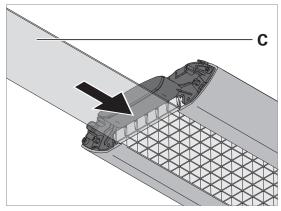


Fig. 21: Sliding in the protective cover.

- ➤ Slide the protective cover **C** into the luminaire below the parabolic grid, see Fig. 21.
- ► Mount the side part again on the luminaire



# 10. Cleaning

# **MARNING**

### Danger of death due to electric shock.

- Disconnect the luminaire from the power supply.
- ▶ **Do not** clean with a wet cloth.

#### **NOTICE**

# Material damage caused by using wrong cleaning agents.

Damage to the luminaire.

- ► Make sure the cleaning agent is compatible with the surface.
- Clean the luminaire with a cloth and a mild detergent.

# 11. Repair

# **MARNING**

#### Danger of death due to electric shock.

Disconnect the luminaire from the power supply.

#### **NOTICE**

# Material damage caused by improper repair.

Damage or destruction of the luminaire.

- Have repairs performed only by the manufacturer or skilled personnel trained by the manufacturer.
- Only spare parts released by the manufacturer may be used as spare parts.

# 12. Disposal



The luminaire is subject to European Directive 2002/96/EC.

▶ Dispose of the luminaire separately from domestic waste using the agencies responsible for disposal and designated by the authorities.

Proper disposal avoids adverse effects on man and the environment.



# 13. Technical data

**NOTE:** The data given on the rating plate attached to the top of the luminaire apply.

#### 13.1 Dimensions

Designation	Value
SAHKQ 60:	456 x 187 x 50 mm
SAHxQ 44/ SAHx 124:	656 x 187 x 50 mm
SAHxQ 66/ SAHx139:	956 x 187 x 50 mm
SAHxQ 88/ SAHx 154:	1256 x 187 x 50 mm

Tab. 5: Dimensions.

#### 13.2 Electrical values

Designation	Value
Voltage range	220-240 V AC
	<b>USA and Canada:</b> 120 V AC
Frequency	50/60 Hz
Power	SAHKQ 60: 23 W
consumption	SAHxQ 44: 23 W
	SAHxQ 66: 33 W
	SAHxQ 88: 43 W
	SAHx124: 27 W
	SAHx139: 44 W
	SAHx154: 60 W
Equipped with (Luminaires with fluorescent lamps)	SAHx124: 1x24 W fluores- cent lamp T5 HO SAHx139: 1x39 W fluores- cent lamp T5 HO SAHx154: 1x54 W fluores- cent lamp T5 HO
Operating unit	Integrated

Tab. 6: Electrical values.

#### 13.3 Classifications

Designation	Value
Protection class	I
Degree of protection	IP 20
Operating mode	Continuous operation
Technical safety check	EN 60598-1

Tab. 7: Classifications.

## 13.4 Symbols

Symbol	Designation
	Protection class I Operation with protective earth conductor
	Protection class III Operation with safety extra low voltage (SELV)
EPA EPA	Suitable for the electro- statically protected area (EPA)
CE	CE conformity mark
c us Intertek	ETL approval
	Disposal in accordance with European Directive 2002/96/EC

Tab. 8: Symbols.